

**MAIL STOP AF
RESPONSE UNDER 37 C.F.R. § 1.116
EXPEDITED PROCEDURE
EXAMINING GROUP 2600**

REMARKS

In the July 7, 2006, final Office Action, the U.S. Patent and Trademark Office (hereinafter "the Office") rejected Claims 1, 2, 4, 5, 7-9, 11, 12, 14, 15, 17, 18, 20-22, 24, and 25 under 35 U.S.C. § 102(e) as being anticipated by the teachings of U.S. Patent No. 6,909,382 ("Trell"). Claims 3, 6, 10, 13, 16, 19, and 23 were rejected under 35 U.S.C. § 103(a) as being unpatentable in view of the teachings of Trell, and further in view of the teachings of U.S. Patent No. 6,765,556 ("Kandogan"). Prior to discussing in detail why applicants believe that all of the claims in this application are allowable, a brief description of applicants' invention and brief description of the teachings of the applied reference are provided. The following discussions of the disclosed embodiments of applicants' invention and the teachings of the applied reference are not provided to define the scope or interpretation of any of the claims of this application. Instead, such discussions are provided to help the Office better appreciate important claim distinctions discussed thereafter.

Background

Prior software and hardware proposals for entering text using a keypad, in particular, a conventional 12-key keypad, have not been entirely satisfactory. Keypads are commonly used to enter alphanumeric data. Conventional 12-key keypads formed of a four-row by three-column matrix of keys were developed when the telephone system changed from rotary dial to touchtone telephones. Each time the key of a touchtone telephone is depressed, a dual-tone multifrequency (DTMF) signal is generated. The two tones identify the key that was depressed. Originally, conventional 12-key keypads were used to enter numeric data—the integers from 0 to 9—plus the "*" sign and the "#" sign. As the telephone system evolved from a land line system to a

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cellular telephone system, and as telephone communication evolved from voice communication to data communication, the use of keypads has evolved and changed. Many modern keypads are used to enter text formed of the letters of the alphabet and symbols as well as numbers. Because the number of letters of many languages, such as the English language, is greater than the number of keys on 12-key keypads, in the past, multiple letters have been associated with selected keys of contemporary 12-key keypads. Multiple depressions of the selected keys in rapid succession result in the entry of a specific letter. For example, the number 2 key of a conventional 12-key keypad includes the letters A, B, C; the number 3 key includes the letters D, E, F, etc. Letters are entered into the memory of a related device, such as a cellular telephone, for example, by rapidly actuating, i.e., depressing and releasing, a particular key the number of times related to the letter. For example, in the case of the number 2 key, one actuation enters the letter A, two rapid actuations enter the letter B, and three rapid actuations enter the letter C. A predetermined interval after the last actuation results in the software that interprets the key presses spacing forward to the next letter position. The # sign key functions as a backspace key and is used to correct text entry errors. Obviously, entering text by the rapid actuation of selected keypad keys is both time consuming and error prone.

Summary of the Claimed Invention

In accordance with this invention, a method form of the invention includes a method for entering text using a keypad that comprises a number of keys fewer than the number of items in the text to be entered. The method comprises detecting the actuation of the keys of the keypad and determining if the detected actuation was created by the actuation of one key or the substantially simultaneous actuation of multiple keys. If the detected key actuation was created by the actuation of one key chosen from a group of "1", "2", "3", "4", "5", "6", "7", "8", "9", "*", "0", and "#", the method allows the entering of the item that is a letter associated with the one

key that is respectively chosen from a group of "g", "b", "e", "i", "k", "n", "q", "u", "x", "s", all caps mode, and backspace function. If the detected key actuation was created by the substantially simultaneous actuation of multiple keys chosen from a group of "1" and "2", "2" and "3", "4" and "5", "5" and "6", "7" and "8", "8" and "9", "*" and "0", "0" and "#", "1" and "4", "2" and "5", "3" and "6", "4" and "7", "5" and "8", "6" and "9", "7" and "*", "8" and "0", and "9" and "#", the method allows the entering of the item that is a letter associated with the multiple keys that is respectively chosen from a group of "a", "d", "j", "m", "t", "w", "z", numerical mode, "h", "c", "f", "p", "l", "o", "r", "v", and "y".

In accordance with further aspects of this invention, in a device containing a keypad formed of a plurality of keys oriented in a row-column matrix, an improvement comprises computer-executable code for detecting the actuation of the keys of the keypad and determining if the detected key actuation was created by the actuation of one key or the substantially simultaneous actuation of two keys. If the detected key actuation is created by the actuation of one key chosen from a group of "1", "2", "3", "4", "5", "6", "7", "8", "9", "*", "0", and "#", the computer-executable code allows the entering of a text item that is a letter associated with the one key that is respectively chosen from a group of "a", "c", "e", "i", "k", "m", "q", "s", "u", "y", all caps mode, and backspace function. If the detected key actuation is created by the substantially simultaneous actuation of two keys chosen from a group of "1" and "2", "2" and "3", "4" and "5", "5" and "6", "7" and "8", "8" and "9", "*" and "0", "0" and "#", "1" and "4", "2" and "5", "3" and "6", "4" and "7", "5" and "8", "6" and "9", "7" and "*", "8" and "0", and "9" and "#", the method allows the entering of a text item that is a letter associated with the two keys that is respectively chosen from a group of "b", "d", "j", "l", "r", "t", "z", numerical mode, "f", "g", "h", "n", "o", "p", "v", "w", and "x".

Summary of Trell

The system of Trell is directed to a programmatic organization method for augmented use of a standardized keyboard, which is capable of detecting depression/touching of single keys as well as simultaneously depressed/touched combinations of keys. According to Trell, simultaneously depressions/touching of two or more adjacent or nonadjacent located keys of the keyboard is decoded as a predetermined character, symbol, action, and so on. Predetermined functions, such as a "Shift," "Cap," or "Num Lock" function, are possible by predetermined single keys or predetermined key combinations.

Summary of Kandogan et al.

The system of Kandogan et al. allows letters to be entered electronically by selecting, in sequential fashion, two keys on a standard phone layout. The two keys in a sequence are located in the same row. The first key selected is the key on which the desired letter is displayed, and the second key is given the spatial position of the desired letter within this group of letters on the key. The letters and keys may be color-coded to aid the user when inputting the two key sequences. Letters may be selected to spell out words on a screen and then sent electronically to a remote device or recipient.

The Claims Distinguished

The Office has failed to show, and applicants are unable to find, where the applied reference disclosed the subject matter of the claimed invention. For example, the applied reference fails to teach as recited in Claim 1:

if the detected key actuation was created by the actuation of one key chosen from a group of "1", "2", "3", "4", "5", "6", "7", "8", "9", "*", "0", and "#", entering the item associated with the one key that is respectively chosen from a group of "g", "b", "e", "i", "k", "n", "q", "u", "x", "s", all caps mode, and backspace function; and

element of the claimed invention must be literally present, arranged as in the claim. *Richardson v. Suzuki Motor Co.*, 868 F.2d 1226, 1236, 9 U.S.P.Q.2d 1913, 1920 (Fed. Cir. 1989). Because the Examiner has failed to show that Trell discloses the identical invention as claimed by Appellants, no *prima facie* case of anticipation has been established.

The Office conceded that Trell does not teach that the letters are English language letters. Therefore, the Office proposes to combine Trell with Kandogan et al., which combination applicants specifically deny. Because Kandogan et al. cannot cure the defects of Trell, namely, the lack of teaching of the backspace function, among other things, there is no benefit for the proposed combination. Thus, no *prima facie* case of obviousness has been established by the Office.

Because the Office has failed to state a *prima facie* case of anticipation and obviousness, the rejections should be withdrawn. Independent Claims 1, 13, and 14 are clearly patentably distinguishable over the cited and applied references. Claims 2-12 and 15-25 are allowable because they depend from allowable independent claims and because of the additional limitations added by those claims. Consequently, reconsideration and allowance of Claims 1-25 are respectfully requested.

Respectfully submitted,

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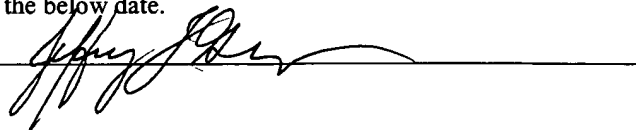


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if the detected key actuation was created by the substantially simultaneous actuation of multiple keys chosen from a group of "1" and "2", "2" and "3", "4" and "5", "5" and "6", "7" and "8", "8" and "9", "*" and "0", "0" and "#", "1" and "4", "2" and "5", "3" and "6", "4" and "7", "5" and "8", "6" and "9", "7" and "*", "8" and "0", and "9" and "#", entering the item associated with the multiple keys that is respectively chosen from a group of "a", "d", "j", "m", "t", "w", "z", numerical mode, "h", "c", "f", "p", "l", "o", "r", "v", and "y."

The Office has indicated that the recited limitation of Claim 1 can be found in Trell (at Figure 2). There is nothing in Figure 2 of Trell that discloses the claim limitation. For example, the claimed invention requires that if the detected key actuation was created by the actuation of the "1" key, the method enters an item "g" that is the letter associated with "1" key. In contrast, when the key "1" is pressed in the system of Trell, the letter "a" is produced. See Figure 2 of Trell. As an additional example, the claimed invention requires that if the detected key actuation was created by the actuation of the "#" key, a backspace is entered. In contrast, no backspace function is provided by Trell.

Similar to the reasons discussed above, the Office has also failed to show, and applicants are unable to find, where the cited and applied references teach "if the detected key actuation is created by the actuation of one key chosen from a group "1", "2", "3", "4", "5", "6", "7", "8", "9", "*", "0", and "#", entering a text item that is a letter associated with the one key that is respectively chosen from a group of "a", "c", "e", "i", "k", "m", "q", "s", "u", "y" all caps mode, and backspace function, as recited in Claim 14. As explained before, none of the cited portions of Trell or other cited references discloses a way to generate a letter from the precise key press combination as recited in the claim limitation or a way to even generate the backspace function.

As specified by M.P.E.P. § 2131.01, "the identical invention must be shown in as complete detail as is contained in the . . . claim." Citing favorably *Richardson v. Suzuki Motor Co.*, 868 F.2d 1226, 1236, 9 U.S.P.Q.2d 1913, 1920 (Fed. Cir. 1989) (emphasis provided). Every